

FHLR91XC13X and FHLR4GC13X Battery Cable



Eland Product Group: B5F

APPLICATION

Battery cable for use in road vehicle applications. including e-Mobility applications. Offers excellent resistance to high and low temperature, ozone, UV and weathering resistance. It is resistant to pressure at high temperatures, motor oil, fuels and hydrolysis, flame retardant, has a high abrasion resistance, and is easy to strip and process.

CHARACTERISTICS

Voltage Rating

U₀: 1000V AC

V₀: 1500V DC

Test Voltage 50 Hz, 5 min

10kV AC

Temperature Range

(3000h): -40°C to + 150°C

Minimum Bending Radius

Fixed: 4x Overall diameter

Flexing: 6x Overall diameter

CONSTRUCTION

Conductor

Bare Copper

Insulation

91X: XLPO (Cross-linked irradiation Polyolefin) for cables $\leq 6 \text{ mm}^2$

4G: EVA (Ethylene Vinyl Acetate) for cables $> 6 \text{ mm}^2$

Screen

TCWB (Tinned copper wire braid)

Wrapping

Tape

Sheath

TPE-E (Vulcanised Thermoplastic Elastomer 13X)

Sheath Colour

● Orange

STANDARDS

ISO 6722-1 class D, ISO 19642-9 class D, EU-directive 2000/53/EG

ISO/IEC 17025 LABORATORY TESTED

This product is subject to the Quality Assurance protocols of The Cable Lab®, an ISO/IEC 17025 accredited cable testing laboratory. Testing includes vertical flame, conductor resistance, tensile & elongation, and dimensional consistency, verified to published standards and approved product drawings.



REGULATORY COMPLIANCE

This cable meets the requirements of the Low Voltage Directive 2014/35/EU and the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab® as meeting the requirements of the BSI RoHS Trusted Kitemark™.





DIMENSIONS FHLR91XC13X

ELAND PART NO.	NOMINAL CROSS SECTIONAL AREA mm ²	CONDUCTOR			CABLE			NOMINAL WEIGHT kg/100m
		NUMBER OF INDIVIDUAL WIRES	NOMINAL DIAMETER OF INDIVIDUAL WIRES mm	NOMINAL DIAMETER mm	NOMINAL DIAMETER OF INSULATION mm	NOMINAL DIAMETER OF SCREEN mm	NOMINAL OVERALL DIAMETER mm	
B5F010025OR	2.5	50	0.26	2.0	2.85	3.3	5.0	4.9
B5F010040OR	4	56	0.31	2.5	3.55	4.0	5.8	7.0
B5F010060OR	6	84	0.31	3.0	4.15	4.7	6.6	9.8

DIMENSIONS FHLR4GC13X

ELAND PART NO.	NOMINAL CROSS SECTIONAL AREA mm ²	CONDUCTOR			CABLE			NOMINAL WEIGHT kg/100m
		NUMBER OF INDIVIDUAL WIRES	NOMINAL DIAMETER OF INDIVIDUAL WIRES mm	NOMINAL DIAMETER mm	NOMINAL DIAMETER OF INSULATION mm	NOMINAL DIAMETER OF SCREEN mm	NOMINAL OVERALL DIAMETER mm	
B5F01008OR	8	60	0.41	3.8	5.05	5.6	7.6	12.5
B5F01010OR	10	78	0.41	4.3	5.75	6.3	8.4	15.8
B5F01012OR	12	92	0.41	4.7	6.10	6.7	8.9	17.9
B5F01016OR	16	126	0.41	5.4	6.90	7.5	9.7	23.0
B5F01020OR	20	154	0.41	6.2	7.60	8.3	10.6	28.2
B5F01025OR	25	189	0.41	6.7	8.20	8.9	11.2	32.8
B5F01030OR	30	224	0.41	7.4	9.10	9.8	12.1	38.5
B5F01035OR	35	273	0.41	7.9	9.70	10.4	12.7	44.7
B5F01040OR	40	301	0.41	8.5	10.40	11.3	13.6	51.3
B5F01050OR	50	385	0.41	9.4	11.50	12.6	14.9	64.2
B5F01060OR	60	294	0.51	10.6	12.60	13.5	15.9	73.1
B5F01070OR	70	360	0.51	11.6	13.70	14.6	17.0	85.8
B5F01095OR	95	480	0.51	13.5	16.20	17.3	19.9	115.3
B5F01120OR	120	589	0.51	15.1	18.00	19.1	22.6	145.5
B5F01150OR	150	741	0.51	17.0	20.00	21.3	24.9	177.4

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM RESISTANCE AT 20 °C Ω/km	NOMINAL TRANSFER IMPEDANCE OF SCREEN AT 30°C MHZ m Ω/m
2.5	7.60	100
4	4.71	110
6	3.14	70
8	2.38	40
10	1.82	30
12	1.52	30
16	1.16	40
20	0.955	30
25	0.743	40
30	0.647	30
35	0.527	60
40	0.473	20
50	0.368	30
60	0.315	30
70	0.259	30
95	0.196	20
120	0.153	20
150	0.122	30